C 1

administering to the mammal an effective amount of [a] an antagonist peptide comprising at least four consecutive amino acid residues from the amino acid sequence of said at least one transmembrane domain or [an effective fragment or analogue] a conservative amino acid substitution variant of said peptide.

20. (Amended) The method of claim 18 wherein the integral membrane protein is [a prokaryotic or eukaryotic] an intracellular membrane protein.

21. (Amended) The method of claim [19] 18 wherein the integral membrane protein is a [mammalian] plasma membrane protein.

C 2

22. (Amended) The method of claim 21 wherein the integral membrane protein is selected from the group consisting of

(a) a G-protein coupled receptor;

(b) a tyrosine kinase receptor;

[(c) an ion channel;]

[(d) an ion channel receptor;]

[(e)] (c) a channel protein;

[(f)] (d) a T cell antigen receptor; and

[(g)] (e) a transporter protein.

C 3

Sub D5

36. (Amended) The method of claim 18 wherein the integral membrane protein has a plurality of transmembrane domains and wherein the antagonist peptide comprises at least four consecutive amino acid residues from the amino acid sequence of any one of said plurality of transmembrane domains or a [fragment or analogue thereof] conservative amino acid substitution variant of said peptide.

C 3

37. (Amended) The method of claim[s] 18 [to 36] wherein the integral membrane protein is a human protein.

Please add new claims 60 to 65, as follows:

60. (New) The method of claim 22 wherein the integral membrane protein is a tyrosine kinase receptor.

61. (New) The method of claim 60 wherein the tyrosine kinase receptor is an epidermal growth factor receptor.

C4

62. (New) The method of claim 60 wherein the tyrosine kinase receptor is a channel protein.

Sub D6

63. (New) The method of claim 60 wherein the tyrosine kinase receptor is a T cell antigen receptor.

64. (New) The method of claim 60 wherein the tyrosine kinase receptor is a transporter protein.

65. (New) The method of claim 64 wherein the transporter protein is a dopamine transporter.

REMARKS

~~Claims 18-37 were pending in the application. Claim 19 is canceled~~, claims 18, 20, 21, 22 and 37 are amended, and new claims 60-65 are added by the Amendment submitted herewith. The Examiner is respectfully requested to reconsider the application and amended claims in view of the following remarks.